**CHE 2060: Pre-lab quiz for extraction of a mixture**

*Due upon your arrival in lab.*

*Read the lab materials and the text and search engines to find answers to these questions.*

1. Look at the SDS for each of the chemicals used in this lab and list their greatest hazards.

2. What physical property does extraction depend upon?

3. What is pKa?

4. Which have lower pKa values, acids or bases?

5. Why do some organic molecules lack pKa values?

6. Does ionizing (or charging) molecules make them more or less soluble in polar solvents?

7. How can acids and bases be made less soluble in polar solvents, enabling them to recrystallize from the solvents?

8. To extract molecules with acidic functional groups in polar or aqueous solvents, should you react them with acids or bases?

9. Why are ice baths used in recrystallization?

10. What is the advantage to evaporating solvents under nitrogen vs. in ambient air?